DOCUMENT RESUME

ED 124 423 SE 020 915

TITLE	R&D Spending to Top $38 Billion in 1976. Science Resources Studies Highlights, May 21, 1976.
INSTITUTION	National Science Foundation, Washington, D.C. Div. of Science Resources Studies.
REPORT NO	NSF-76-309
PUB DATE	21 May 76
NOTE	3p.; Not available in hard copy due to numerous small print and colored type
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Annual Reports; *Educational Finance; Engineering Education; *Federal Aid; Financial Support; *Research; Science Education; Scientific Research
IDENTIFIERS	*National Science Foundation; NSF

ABSTRACT

This report presents data compiled as part of a comprehensive program to measure and analyze the nation's resources expended for research and development. R&D spending in the United States is expected to reach $38.1 billion in 1976, 8 percent above the 1975 level. For the first time in three years, R&D funds are expected to increase in terms of constant dollars - 2 percent - assuming a 6 percent rate of inflation for 1976. Other figures shown in this report show that the Federal Government is expected to spend $20.1 billion on R&D programs in 1976 with most of the increase planned for areas of defense, space, and energy. Non-Federal R&D support is also expected to increase by 8 percent over the 1975 level, to $18.0 billion in 1976. Industry will provide 92 percent of the funds. Graphed data are presented to show R&D funding trends for the period 1967 through 1976. Tabulated data presents funds, by performer (Federal Government, Industry, Universities and Colleges, Associated FFRDC's and other nonprofit institutions) for years 1972 through 1976. The data given exclude universities and colleges department research. (Author/EB)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

SE

nsf SCIENCE RESOURCES STUDIES **HIGHLIGHTS**

NATIONAL SCIENCE FOUNDATION • WASHINGTON, D. C. 20550 • MAY 21, 1976 • NSF 76-309

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

R&D Spending to Top $38 Billion in 1976

These data were compiled from information on R&D activities collected through individual sector surveys conducted as part of a comprehensive program to measure and analyze the Nation's resources expended for research and development. (Limited exclusions are discussed below.) More details on R&D expenditures and manpower will be published in a report entitled National Patterns of R&D Resources: Funds & Manpower in the United States, 1953-1976 *to be available in the summer of 1976 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.*

ED124423

- R&D spending in the United States is expected to reach $38.1 billion in 1976, 8 percent above the 1975 level of $35.2 billion. For the first time in three years, R&D funds are also expected to increase in terms of constant dollars—2 percent—assuming a 6-percent rate of inflation for 1976.

- R&D expenditures are expected to constitute 2.2 percent of the U.S. gross national product (GNP) in 1976, down from 2.3 percent in 1975. This proportion has declined steadily from its peak of 3.0 percent of GNP in 1964, primarily as a result of the slowdown in growth of Federal R&D spending.

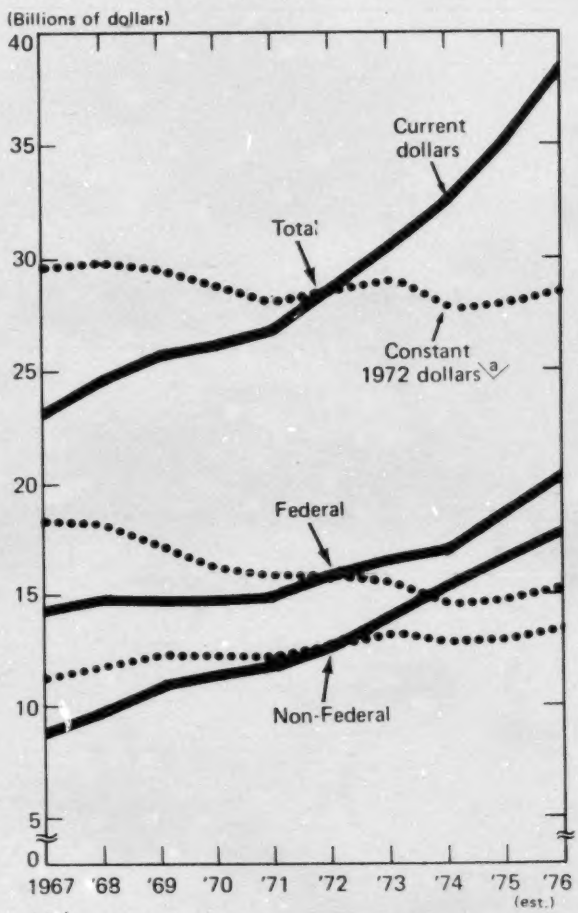
- Basic research spending is expected to reach $4.8 billion in 1976, an increase of 7 percent over 1975. In terms of constant dollars, funds for basic research are expected to grow 1 percent.

R&D Support

The Federal Government is expected to spend $20.1 billion on R&D programs in 1976, 8 percent more than in the previous year. Measured in constant dollars, Federal support of R&D will show a 2-percent constant-dollar increase in 1976, in contrast to an average annual rate of decline of 2.2 percent since 1967. Most of the increase is planned for the areas of defense, space, and energy. The Federal Government is expected to fund 53 percent of the total U.S. R&D effort in 1976, the same percentage as in 1975.

Non-Federal R&D support is also expected to increase by 8 percent over the 1975 level, to $18.0 billion in 1976. Industry will provide 92 percent, or $16.6 billion of the non-Federal R&D funds.

R&D funding trends: 1967-76



[a] Based on GNP implicit price deflator.

SOURCE: National Science Foundation

SE 020915

(Prepared in the Industry Studies Group, Division of Science Resources Studies.)

R&D Performance

Industry will remain the dominant performer of research and development in 1976, spending an estimated $26.5 billion on R&D projects, or nearly 70 percent of the total. Industry leads in the performance of applied research and development, spending 54 percent and 86 percent, respectively, of the total funds for these activities.

Universities and colleges, which perform about 10 percent of the Nation's research and development—and, more importantly, about 55 percent of the Nation's basic research—are expected to spend $3.7 billion for R&D in 1976, 8 percent more than reported in 1975. Three-fourths of this increase is projected for the performance of basic research.

Federal performance of research and development is also expected to increase in 1976, while nonprofit institutions will show a slight decline.

Funds for research and development, by performer: 1972-76

[Millions of dollars]

Year	Total	Federal Government	Industry[1]	Universities and colleges	Associated FFRDC's[2]	Other nonprofit institutions[1]
1972	$28,415	$4,482	$19,383	$2,676	$764	$1,110
1973	30,417	4,619	20,921	2,940	817	1,120
1974	32,322	4,815	22,369	3,021	865	1,252
1975(est.)	35,209	5,302	24,250	3,395	987	1,275
1976(est.)	38,090	5,600	26,500	3,660	1,080	1,250

[1] Expenditures for Federally Funded Research and Development Centers administered by both industry and by nonprofit institutions are included in the totals of their respective sectors.

[2] FFRDC's administered by individual universities and colleges and by university consortia.

SOURCE: National Science Foundation

Limitations

The data exclude universities and colleges departmental research, which is considered an integral part of instructional programs, and for which separate data are frequently not maintained. Also, intramural R&D expenditures of State and local governments have not been included.

National Science Foundation
Washington, D.C. 20550

Official Business
PENALTY FOR PRIVATE USE, $300

Postage and Fees Paid
National Science Foundation

U.S.MAIL

THIRD CLASS
Bulk Rate